

Notice of Allowability

Application No.

10/562,713

Applicant(s)

ZHANG, GUANGMING

Examiner

CHRISTOPHER T. WYLLIE

Art Unit

2465

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address--

All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included herewith (or previously mailed), a Notice of Allowance (PTOL-85) or other appropriate communication will be mailed in due course. **THIS NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS.** This application is subject to withdrawal from issue at the initiative of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPEP 1308.

1. ☒ This communication is responsive to 06/21/2010.
2. ☒ The allowed claim(s) is/are 5-9 (1-5 respectively).
3. ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some* c) ☐ None of the:
- ☒ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a)).
- * Certified copies not received: _____.

Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDONMENT of this application.

THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.

4. ☐ A SUBSTITUTE OATH OR DECLARATION must be submitted. Note the attached EXAMINER'S AMENDMENT or NOTICE OF INFORMAL PATENT APPLICATION (PTO-152) which gives reason(s) why the oath or declaration is deficient.
5. ☐ CORRECTED DRAWINGS (as "replacement sheets") must be submitted.
- (a) ☐ including changes required by the Notice of Draftsperson's Patent Drawing Review (PTO-948) attached
- 1) ☐ hereto or 2) ☐ to Paper No./Mail Date _____.
- (b) ☐ including changes required by the attached Examiner's Amendment / Comment or in the Office action of Paper No./Mail Date _____.
- Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of each sheet. Replacement sheet(s) should be labeled as such in the header according to 37 CFR 1.121(d).**
6. ☐ DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL.

Attachment(s)

- | | |
|--|--|
| 1. <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 5. <input type="checkbox"/> Notice of Informal Patent Application |
| 2. <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 6. <input checked="" type="checkbox"/> Interview Summary (PTO-413),
Paper No./Mail Date <u>07/20/2010</u> . |
| 3. <input type="checkbox"/> Information Disclosure Statements (PTO/SB/08),
Paper No./Mail Date _____ | 7. <input checked="" type="checkbox"/> Examiner's Amendment/Comment |
| 4. <input type="checkbox"/> Examiner's Comment Regarding Requirement for Deposit
of Biological Material | 8. <input checked="" type="checkbox"/> Examiner's Statement of Reasons for Allowance |
| | 9. <input type="checkbox"/> Other _____. |

/Jayanti K. Patel/
Supervisory Patent Examiner, Art Unit 2465

EXAMINER'S AMENDMENT

1. An examiner's amendment to the record appears below. Should the changes and/or additions be unacceptable to applicant, an amendment may be filed as provided by 37 CFR 1.312. To ensure consideration of such an amendment, it MUST be submitted no later than the payment of the issue fee.

2. This application has been amended as follows:

Claim 5 – A multicast source control method, comprising the steps of:

a. creating multicast source authentication information in a master multicast source authentication server;

b. the master multicast source authentication server ~~a management platform of the multicast source authentication information~~ dynamically updating said multicast source authentication information in accordance with a restriction on a multicast source;

c. controlling sending a multicast message from the multicast source in accordance with said multicast source authentication information,

wherein said multicast source authentication information is recorded in a tabular form; said multicast source authentication information table contains a corresponding relationship between a unicast ~~multicast source~~ address and a masked multicast address wherein said masked multicast address is a result of an AND operation on a multicast address contained in the table and an address mask;

wherein said step b further comprises: a plurality of slave multicast source authentication servers, in accordance with the multicast source authentication information in the ~~a~~ master multicast source authentication server, updating the

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multicast source authentication information stored therein at a predefined period; when the multicast source authentication information in said master multicast source authentication server is changed, notifying said slave multicast source authentication server to update the multicast source authentication information stored therein; and

wherein said step c further comprises:

c1. after receiving a multicast message sent from the multicast source, a predefined node initiating an authentication request to ~~the~~ a preconfigured slave multicast source authentication server thereof;

c2. said preconfigured slave multicast source authentication server performing a longest prefix matching with the multicast source address contained in the authentication request with ~~based on~~ the multicast address result in the multicast source authentication information table stored therein, and sending a response indicating whether the authentication request is successful to said predefined node according to the matching result, wherein:

c21. if the ~~multicast source~~ unicast address corresponding to the matched multicast address in the multicast source authentication table is identical to the multicast source address in said authentication request, sending a response indicating that the authentication request is successful to said predefined node; after receiving the response indicating that the authentication request is successful, said predefined node permitting said multicast message to enter into the multicast network;

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c22. if the ~~multicast source~~ unicast address corresponding to the matched multicast address in the multicast source authentication table is different from the multicast source address in said authentication request, sending a response indicating that the authentication request has failed, to said predefined node; after receiving the response indicating that the authentication request has failed, said predefined node forbidding said multicast message to enter into the multicast network.

Authorization for this examiner's amendment was given in a telephone interview with Brain A. Carlson on July 20th, 2010.

Reasons For Allowance

3. Claim 5-9 are allowed.
4. The following is a statement of reasons for the indication of allowable subject matter:

The prior art of record do not disclose, suggest, or provide motivation, singularly or in combination a method of determining access to a multicast network based on a preconfigured slave multicast source authentication server performing a longest prefix matching with the multicast source address contained in the authentication request with the multicast address result in the multicast source authentication information table stored therein address contained in the table and an address mask wherein there is a corresponding relationship between a unicast address and a masked multicast address wherein said masked multicast address is a result of an AND operation on a multicast address contained in the table and an address mask.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to CHRISTOPHER T. WYLLIE whose telephone number is (571) 270-3937. The examiner can normally be reached on Monday through Friday 8:30am to 6:00pm EST.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Jay Patel can be reached on (571) 272-2988. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Christopher T. Wyllie/
Examiner, Art Unit 2465